CLAIM AMENDMENTS

1. (Currently Amended) An ultraviolet-light radiating apparatus for ~~radiating~~ irradiating with ultraviolet light ~~to~~ a film that is to be processed and that is supported on a substrate, comprising:

first ultraviolet-light radiating units for radiating ultraviolet light having a wavelength ~~of~~ not exceeding 200 nm ~~or shorter~~; and

second ultraviolet-light radiating units for radiating ultraviolet light having a wavelength longer than 200 nm.

2. (Original) The ultraviolet-light radiating apparatus according to claim 1, further comprising a storage unit for accommodating the first and second ultraviolet-light radiating units and having a light-transmitting window facing the film, wherein the storage unit is filled with an inert gas.

3. (Currently Amended) The ultraviolet-light radiating apparatus according to claim 1, wherein the second ultraviolet-light radiating units radiate ~~the~~ ultraviolet light having energy higher than binding energy of constituent molecules of the film.

4. (Currently Amended) A wet etching apparatus comprising:

a stage for holding a substrate ~~having~~ supporting a film to be etched;

first ultraviolet radiating units for ~~radiating~~ irradiating the film with ultraviolet light having a wavelength ~~of~~ not exceeding 200 nm ~~or shorter to the film~~;

a chemical-solution coating unit for applying a coating ~~a~~ of chemical solution ~~on~~ to the film; and

second ultraviolet radiating units for ~~radiating~~ irradiating the film through the coating of the chemical solution with ultraviolet light having a wavelength longer than 200 nm ~~to the film through the chemical solution~~.

5. (Currently Amended) The etching apparatus according to claim 4, wherein the stage holds the substrate in an ~~atmosphere containing~~ ambient including oxygen.

6. (Currently Amended) The etching apparatus according to claim 4, wherein the second ultraviolet radiating units radiate ~~the~~ ultraviolet light having energy higher than binding energy of constituent molecules of the film.

7. (Currently Amended) A wet etching method comprising:

~~radiating first~~ irradiating a film to be etched and on a substrate with ultraviolet light having a wavelength ~~of~~ not exceeding 200 nm ~~or shorter to a film to be etched on a substrate~~;

applying a coating of a chemical solution ~~on~~ to the film after ~~radiating~~ irradiating the ~~first~~ film with ultraviolet light having a wavelength not exceeding 200 nm; and

~~radiating second~~ irradiating with the film through the chemical solution with ultraviolet light having a wavelength longer than 200 nm ~~to the film through the chemical solution~~.

8. (Currently Amended) The wet etching method according to claim 7, ~~wherein~~ including irradiating the ~~first~~ film with the ultraviolet light ~~is radiated to the film~~ having a wavelength not exceeding 200 nm in ~~atmosphere containing~~ an ambient including oxygen to generate oxygen radicals and ozone ~~gas in vicinity of~~ proximate the film.

9. (Currently Amended) The wet etching method according to claim 8, wherein an organic coating formed on a surface of the film is removed by the oxygen radicals and ozone ~~gas~~.

10. (Currently Amended) The wet etching method according to claim 7, ~~wherein~~ including irradiating the ~~second~~ film with the ultraviolet light having a wavelength longer than 200 nm and having energy higher than binding energy of constituent molecules of the film ~~is radiated~~.

11. (Currently Amended) A method of manufacturing a semiconductor device, comprising:

forming a high-k dielectric film on a substrate;

forming a gate electrode on the high-k dielectric film;

~~radiating first~~ irradiating the high-k dielectric film with ultraviolet light having a wavelength ~~of~~ not exceeding 200 nm ~~or shorter to the high-k dielectric film~~;

applying a coating of a chemical solution ~~on~~ to the high-k dielectric film after ~~radiating~~ irradiating with the ~~first~~ ultraviolet light having a wavelength not exceeding 200 nm;

~~radiating second~~ irradiating the high-k dielectric film, through the chemical solution, with ultraviolet light having a wavelength longer than 200 nm ~~to the high-k dielectric film through the chemical solution~~; and

forming diffusion regions in the substrate after ~~radiating~~ irradiating with the ~~second~~ ultraviolet light having a wavelength longer than 200 nm.

12. (Currently Amended) The method of manufacturing a semiconductor device according to claim 11, ~~wherein the first ultraviolet light is radiated to~~ including irradiating the high-k dielectric film with the ultraviolet light having a wavelength not exceeding 200 nm in ~~atmosphere containing~~ an ambient including oxygen to generate oxygen radicals and ozone ~~gas in vicinity of~~ proximate the high-k dielectric film.

13. (Currently Amended) The method of manufacturing a semiconductor device according to claim 12, wherein an organic coating formed on a surface of the high-k dielectric film is removed by the oxygen radicals and ozone ~~gas~~.

14. (Currently Amended) The method of manufacturing a semiconductor device according to claim 11, ~~wherein~~ including the ~~second~~ irradiating the high-k dielectric film with the ultraviolet light having a wavelength longer than 200 nm and having energy higher than binding energy of constituent molecules of the high-k dielectric film ~~is radiated~~.